MARYLAND HEALTH CARE COMMISSION

SPOTLIGHT ON MARYLAND

Hospital Outpatient Spending[1]

In *State Health Care Expenditures: Experience from 2000*, the Maryland Health Care Commission (MHCC) estimated that hospital spending, inpatient and outpatient combined, was the single largest source of growth in the state health expenditure accounts (SHEA). Outpatient spending increased more rapidly (13.7 percent) than any other type of health expenditure in the SHEA. As a result, outpatient hospital spending contributed almost as much (14.1 percent) as inpatient services (14.3 percent) to the overall statewide growth rate of 8.4 percent, even though outpatient services accounted for just over 25 percent of all hospital spending in 1999.

The 2000 SHEA provides a limited picture of changes that are taking place in hospital outpatient services. Outpatient spending has continued to rise since 2000, based on information released by the Maryland Health Services Cost Review Commission (HSCRC) for services provided by Maryland hospitals,[2] raising several important questions. Are hospitals increasing prices for outpatient services more rapidly than for inpatient care? What types of services are most responsible for such rapid growth? Is the number of patient visits growing rapidly or is the "typical" hospital outpatient visit changing? Has the growth in outpatient spending been the result of services moving from either physician offices or inpatient settings into emergency rooms, outpatient clinics, and ambulatory care settings?

Figure 1: Annual Rates of Growth in Inpatient and Outpatient Hospital Spending, 1999-2001

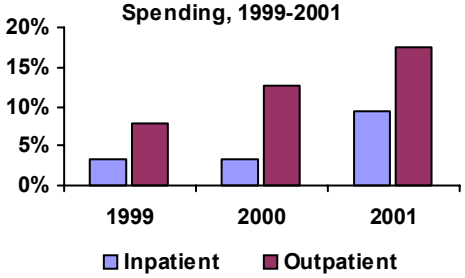
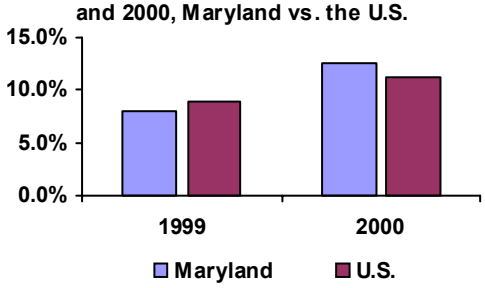


Figure 1 illustrates the rapid and accelerating growth in hospital outpatient expenditures in Maryland hospitals. In 1999, spending on outpatient services grew 7.9 percent, substantially more than the 3.2 percent growth in inpatient spending.[3] Since then, inflationary pressures have driven up both types of spending so that, in 2001, outpatient spending rose 17.4 percent while inpatient spending rose 9.5 percent. However, these types of changes are not just taking place in Maryland. Figure 2 compares the growth of outpatient spending in Maryland with the growth in the entire United States for 1999 and 2000, the most recent years for which complete annual data are available.[4] In 1999, outpatient spending in the nation grew more rapidly (8.9 percent) than in Maryland. National spending also accelerated in 2000, although the 11.2 percent growth rate was less than the 12.6 percent reported in Maryland.

Figure 2: Annual Rates of Growth in Outpatient Hospital Spending, 1999 and 2000, Maryland vs. the U.S.



Significance

Several possible explanations have been offered for such rapid increases in hospital outpatient spending. One is that medical technology has evolved rapidly over the last decade, making it possible to handle cases safely and effectively, on an outpatient basis, that previously required inpatient hospital stays. Financial pressures on payers and providers have also encouraged the industry to shift patients into outpatient settings whenever it is clinically appropriate to do so. Another possibility is that the nature of hospital outpatient services has changed radically in recent years, as new, high-cost

technologies have been introduced into outpatient settings. For example, recent advances in cancer therapy include a variety of expensive chemo-therapy agents and radioactive implants that deliver concentrated radiation in a localized manner. As such technologies become available, they tend to increase the number of visits to hospital outpatient facilities and to increase the cost of a "typical" visit.

Increases in outpatient spending may also reflect changes in how hospitals have positioned themselves in many communities. Recently, many hospitals have either built new outpatient capacity or acquired physician practices, ambulatory care centers, and other community-based health care facilities. The purpose of these expansions is to diversify the hospital enterprise and to stabilize the flow of patients into facilities. To support this strategy, many hospitals now aggressively market their emergency care departments as alternatives to urgent care centers. Furthermore, national prudent lay person legislation, as well as recent legislation in Maryland, have also made it easier for insured individuals to obtain care in the emergency room.

The incentives in Maryland's hospital rate-setting system also contribute to the growth in outpatient spending. Maryland is unique in that it regulates the prices that hospitals charge for both inpatient and outpatient services for all payers, including Medicare and Medicaid. Because this system regulates unit prices, hospitals can generate additional revenue within regulatory constraints by delivering more intensive patient encounters. The state also constrains the average cost of inpatient hospital stays to counteract these incentives. However, no comparable mechanism exists for regulating the cost of outpatient visits.[5] As hospitals have been increasingly pressed on inpatient services, some observers believe that they have become more aggressive in generating revenue from outpatient sources.[6]

Shifts in Where Services Are Provided

The Maryland Medical Care Data Base (MCDB) offers another source of information about the growth in hospital outpatient spending. The MCDB only contains information on services provided by physicians and other health professionals in Maryland.[7] However, when physicians provide services in hospital settings, there are generally two bills produced, one for the physician service and one to cover the cost of hospital resources used to support the physician in delivering that service. Since the same billing codes are used to describe services on both bills, physician bills represent a reasonable, albeit indirect, approach to understanding the number of patient visits and the types of services provided during those visits.

Table 1: Percent Distribution of Claims by Place of Service, 1999-2000

	1999	2000	Diff.
Inpatient Hospital	7.3%	7.6%	6.8%
Outpatient Hospital	12.9	14.2	14.4
Physician Office	67.4	67.3	3.4
Office Facility	6.4	4.8	-22.3
Other Settings	6.0	6.1	5.2
All Settings	100%	100%	3.6 %

Note: Analysis excludes HMO claims in MCDB.

Table 1 summarizes information from the MCDB concerning the location of services in 1999 and 2000.[8] It shows, for example, that two-thirds of all non-HMO claims in 1999 (67.4 percent) involved services provided in physician offices and that this portion barely changed from 1999 to 2000 (67.3 percent). It also shows that the growth in hospital outpatient spending is partially attributable to an increasing number of claims. In 1999, hospital outpatient services represented 12.9 percent of all claims involving non-HMO services. In 2000, outpatient services represented 14.2 percent of such claims. In fact, claims associated with hospital outpatient services increased 14.4 percent, more than for any other setting in the MCDB.

Table 1 suggests that the increase in outpatient volume is apparently not the result of inpatient hospital services shifting, on balance, into outpatient settings. The percent of claims associated with inpatient hospital stays actually rose 6.8 percent from 1999 to 2000. The growth in hospital outpatient claims may be, at least partially, the result of reductions in the number of claims involving office facilities. From 1999 to 2000, the *number* of such

claims fell 22.3 percent and the *portion* of claims associated with office facilities fell from 6.4 percent to 4.8 percent.

Table 2: Average Services per Claim by Place of Service, 1999-2000

	1999	2000	Diff
Inpatient Hospital	1.70	1.68	-1.0%
Outpatient Hospital	1.75	1.82	4.0
Physician Office	1.68	1.72	2.4
Office Facility	2.27	2.06	-9.3
Other Settings	2.13	2.14	0.6
All Settings	1.76	1.78	1.0%

Note: Analysis excludes HMO claims in MCDB.

Changes in Cost per Claim

Table 2 summarizes the average number of services per claim by place of service and year. While the overall average number of services per claim is relatively stable (1.76 in 1999 vs. 1.78 in 2000), there are interesting changes in this number associated with place of service. The average number of services on claims for hospital outpatient services grew more from 1999 to 2000 than for any other location, rising 4 percent from 1.75 to 1.82. This increase alone would account for a 4 percent growth in outpatient spending.

Tables 1 and 2 together suggest that hospital outpatient spending is rising because of increases both, in the number of hospital outpatient claims and in the average number of services per claim. Unfortunately, the MCDB does not contain direct information on the cost of hospital services. It also excludes several important groups of patients that account for large numbers of hospital outpatients.

The HSCRC collects encounter-level data that offer a more direct view of hospital outpatient spending. However, these data do not span the full range of hospital outpatient services; they apply primarily to ambulatory surgery and emergency departments.

Table 3: Number of Cases and Average Charge for Ambulatory Surgery Cases, Q1 2000 to Q1 2001

	Q1 2000	Q1 2001	Growth	Effect Overall
No. of Cases	91,604	93,716	2.3%	
Charge per Case	$1,279	$1,509	18.0%	100.0%
Operating Room	654	707	8.1	23.0
Medical Supplies	309	427	38.2	51.3
Drugs	64	67	4.7	1.3
Laboratory	85	100	17.6	6.5
Radiology	99	111	12.1	5.2
Other	68	97	42.6	12.6

An analysis of these encounter data was presented to the HSCRC at its November 2001 meeting.[9,10] Table 3 is adapted from that presentation and shows how hospital-based ambulatory surgery cases changed from the first quarter (Q1 = January–March) of 2000 to the first quarter of 2001. In particular, the number of ambulatory surgery visits rose 2.3 percent, while the average charge per case increased 18.0 percent. According to the information contained in Table 3, increases in the costs of medical and surgical supplies accounted for over half of the total increase in spending from Q1 2000 to Q1 2001. Operating room charges are the second largest source of growth; they accounted for more than 23 percent of the increase in spending on ambulatory surgical services.

Table 4: Growth in Emergency Room Spending, CY 2000

	Jan-Jun	Jul-Dec	Percent Change
Total Spending ($) ($1,000,000s)	166.10	179.80	8.3%
Number of Visits (1,000s)	612.90	635.03	3.6
Charge per Visit	270.92	283.16	4.5

Finally, Table 4 summarizes information presented to the HSCRC regarding the growth in emergency room services during calendar year 2000[11]. It shows that the number of visits and the average charge per visit were both significant factors in explaining the overall increase in spending on hospital emergency services during this period. From the first half of 2000 to the second half of the year, visits to Maryland emergency rooms rose 3.6 percent. The average charge per visit rose 4.5 percent.

Conclusion

The MHCC recently issued two reports that document rapid increases in hospital outpatient spending, one based on the 2000 State Health Expenditure Accounts (SHEA) and the other on the 1999 and 2000 Maryland Medical Care Data Base. Analyses of the MCDB reported here and in MHCC's recent report[12] suggest that these increases are due both to a larger number of claims for services provided in hospital outpatient departments and to patients receiving more services per claim, on average. Analyses of encounter-level data collected by the HSCRC for ambulatory surgical and emergency room services reinforce these conclusions, although these data also suggest that increasing resource-intensity of outpatient visits is a more important explanation for spending growth.

Such findings illustrate the changing role of hospitals and hospital-based providers in the current health care industry. Hospitals are no longer primarily devoted to acute, inpatient services. As financial incentives and new technologies reduced hospital admissions and occupancy rates, hospitals moved to expand their role in other areas and develop more integrated delivery systems with the acute inpatient service at its hub. The net result has been an expansion of hospital outpatient services driven, at least partly, by shifts in the location of care from community-based facilities into hospital-outpatient departments. In this context, it is interesting to note that recent increases in the number of outpatient claims are not associated with net reductions in inpatient volume. According to the MCDB, the number of claims in both settings increased from 1999 to 2000.

The growth of hospital outpatient services has important implications for health policy in Maryland because of the extent to which the state regulates both prices and capacity. Moving forward, it is important for the state to ensure that hospitals provide outpatient services on an efficient and effective basis. At the same time, it is important to recognize that the growth in outpatient spending is driven, in part, by new clinical capabilities. The state will need to monitor the growth in hospital-based services to ensure that financial incentives encourage appropriate clinical decisions and that adequate capacity exists to meet new demands for hospital outpatient services.

[1] This analysis was conducted by Dr. Dean Farley of HSS, Inc. under subcontract to Social & Scientific Systems, Inc. as part of its contract with the Maryland Health Care Commission (contract DHMH-IRMA-99-518).

[2] Health Services Cost Review Commission, *Monitoring Maryland Performance: HSCRC Monthly Charge Per Case Summary*. Issued monthly.

[3] HSCRC data differ from SHEA estimates of hospital spending because of differences in the scope of data collection. The HSCRC data presented here exclude services provided by hospitals located outside of Maryland, as well as unregulated services provided by Maryland hospitals (e.g., some ambulatory surgical visits). The data also exclude services provided at specialty hospitals (e.g., psychiatric and rehabilitation facilities). In contrast, the SHEA is designed to measure spending for services received by Maryland residents, regardless of where those services are provided.

[4] National data are taken from Bradley C. Strunk and others, "Tracking Health Care Costs: Hospital care surpasses drugs as the key cost driver." *Health Affairs*, November/December 20(6):8. Full text is available as a Web Exclusive at www.healthaffairs.org, posted in September 2001.

[5] The Maryland agency responsible for administering the hospital rate setting system, HSCRC, has long recognized this limitation in its regulatory approach to outpatient services, but it has been limited in its ability to deal with the problem due to providers' inadequate reporting on outpatient services.

[6] There is also evidence that some of the increase in outpatient expenditures is an artifact of the regulatory system in Maryland, which provides hospitals with an incentive to allocate a disproportionate share of their overhead to outpatient services.

[7] See *Practitioner Utilization: Trends within Privately Insured Patients, 1999-2000* (Baltimore, MD: MHCC, March 2002) for a detailed description of the process that is used to assemble and edit the data contained in the Maryland MCDB, as well as limitations on the scope and interpretation of these data. An important limitation of the MCDB is its scope. It only includes information on claims for privately insured individuals that are paid by private health plans and insurers on a fee-for-service basis. As such, it excludes uninsured claims; claims covered by Medicare, Medicaid, or self-insured arrangements; and services provided under capitated arrangements for which providers are not paid on a per-service basis.

[8] This analysis excludes HMO-covered services because changes in the location and types of HMOs operating in Maryland complicate the analysis and interpretation of HMO claims.

[9] This analysis was conducted by J. Graham Atkinson. The MHCC would like to express its appreciation to Dr. Atkinson for generously providing the results of his analysis for inclusion in this report.

[10] The HSCRC is continuing to analyze spending on hospital outpatient services in Maryland and to compare the rates of increase in such spending between Maryland and the U.S.

[11] Because the ambulatory surgery and emergency room encounter data involve two separate databases, the two sources cannot be analyzed in the same manner.

[12] MHCC, *Practitioner Utilization: Trends within Privately Insured Patients, 1999-2000* (Baltimore, MD: MHCC, March 2002)